

Research on Effective Management of the Internship Process in Colleges and Universities Under the Background of "Internet +"

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Abstract-Under the background of "Internet +", we explore the use of information technology and "Internet +" thinking to effectively monitor all aspects of the internship process, so as to solve the problems of unprepared information, poor guidance, supervision of practice, and lack of quality control. The article puts forward the practice process management method and specific solutions based on "Internet + thinking". Finally, practice has proved that the use of "Internet +" can effectively improve the standardization of practice process management and improve the management level.

Keywords-*internet plus, practice process management, education informationization*

I. INTRODUCTION

The Ministry of Education and other departments pointed out in their opinions on further strengthening practical education in Colleges and Universities that practical teaching is an important part of the school's teaching work and an important link in deepening classroom teaching, which requires strengthening the practical teaching link. Increase the proportion of practice teaching. Practice, as an indispensable link in practical teaching, has a direct impact on the training quality of applied talents in colleges and universities. With the expansion of enrollment in colleges and universities, the number of interns continues to increase, and the types and numbers of internships are on the rise. Because the students are too scattered in the practice and cannot carry on the effective supervision and management, some students perfunctory in the practice process, even do not go to the practice, false report the practice examination material. The heavy practice management work brings a lot of pressure to the school management staff. If there is no perfect practice process management method, it is difficult to guarantee the effect of the practice. In order to promote the overall and coordinated development of college students' comprehensive ability, it is necessary to deepen the relevant research on practice process management by strengthening the management of practice process and improving the quality of practical teaching in colleges and universities.

II. RESEARCH STATUS AND ANALYSIS

There are many researches on the internship of college students at home and abroad. Researches in these years include the perfection of the internship system, introduction of the internship mode, summary of experience, optimization of the internship process, etc. The research on internship process is mainly in two aspects: The reasons for the success of the internship process and ways to optimize the internship process [1]. With the rapid development of information technology, Building online platforms with the help of information technology and managing the internship process through internship management system become a new direction of this research.

In an internship placement project in University of Girona, Spain, monitoring different stages of the internship with the help of online platform has played a significant role in optimizing the internship process and improving the internship quality [2]. In vocational education, Canadians use Weibo as communication platform to help students timely with their problems and confusion during the internship, improve the effect of the internship by strengthening the management of the process and diversifying evaluation methods [3]. In developed countries like the United States and Germany, the internship process has been normatively managed with the help of information technology.

A decade ago, Yu Xiaoming and his fellow workers proposed that information technology could be used to develop online internship management system, manage the process remotely, improve the process management and quality monitoring system and improve the efficiency and management of the internship [4]. Chen Hui and his fellow workers proposed an undergraduate internship management based on the online platform, and developed an internship information management system, to make it convenient for students to get the information of employing enterprises, for schools to master students' internship situation and view companies' feedback on interns [5]. In July, 2015, the Guidance on Actively Promoting "Internet +" conducted by State Council pointed out that Internet's development with other fields has a bright future and infinite potential, and has become an unstoppable trend of time. "Internet +

Education” is a new form of education in the integration of the Internet and education. Zhou Xiaohong suggests in Innovation of practice Management system in Application-oriented Colleges and Universities in the era of "Internet + ", in view of the problems existing in the current internship management, such as vague objectives, improper methods, lack of evaluation and insufficient guarantee, the managers of application-oriented colleges and universities must use the "Internet + " thinking to construct the interactive management between teachers and students in schools and enterprises [6]. Yang Xin, Li Jian and others proposed to use the "Internet" thinking and big data technology to build a real-time, interactive and efficient internship management platform, and to use the functions of online investigation and data statistics and analysis to solve the shortage of internship posts. Internship management difficulties and other issues, to achieve effective feedback, improve the quality of the internship [7]. After comparing with the traditional practical teaching management mode, Su Xiaoxu put forward the practical teaching management strategy based on the "Internet", including optimizing the practical teaching design by using the network media technology. Real-time tracking and feedback of practical teaching effects are carried out through network media [8].

III. RESEARCH BASED ON THE INTERNSHIP PROCESS MANAGEMENT OF "INTERNET+"

In view of the problems existing in the internship management of colleges and universities, I will use the "Internet" thinking to explore the practice process management method based on the "Internet" technology. Finally, through the practice test, the author puts forward the concrete research framework, as shown in figure 1.

For colleges and universities, to analyze and search problems exists during the progress of practice usually base on the four following dimensions: quality standards of practice, practice teaching managements, practice monitor feed backs and quality evaluations of practice. Generally speaking, quality standards of practice contain the Practice Outline, Practice Plan, Internship Guide Book drafted by enterprise, organization management of practice, evaluation of practice grades, etc. Previously, the majority of high schools prefer to print and issue them to the students, then ask them to assemble for mobilization and interpretation before the practice. After this reform in our techniques, we are able to make widely utilization of information technology. By informationizing all data through information's publication and push and online videos; we can define the practice standards of students by their life plans, practice purposes, demands as well as their goals, practice disciplines and education of practice security. Even if they engage difficulties during the progress of their practice, they can still check them out through their mobile devices. Meanwhile, the data of students' studies and reading can also be checked, summarized and analyzed through this practice management platform. Practice teaching management is throughout the whole progress.

Information of practice bases, of students, of school managers, of students' advisers, of posts and the changes on their practice positions and posts during the progress have greatly increased the difficulty for the school managers. By using the internet platform, we can make the visibility of related data comes to real, and we can filter and match those practice posts automatically. Abiding by these procedures, we would be able to finish the process audit on the changes in our practice thus avoid many problems like the inaccurate information and untimely feed back caused by paper traditional registration. We register our practice attendances by making use of the Electronic Fence, the GPS system and the Mobile Software. To prevent our students from unexpected circumstances as offsite situation and missing, they have to make their registrations in assigned zones thus schools can track their attendances at any time. Furthermore, students were asked to write practice journals and upload pictures of their working circumstances and procedures during their work every day in order to avoid any falsifications. And for further examination on the authenticity of their studies, schools are entitled to do selective examination by assigning certain student to register or upload photos of the working place. There will be no falsification because we demand our students to write practice journals and upload the pictures of their working procedures and places through the platform every day. If students have to change their methods, places of practice due to physical, job, school demands or any other reasons; those data can also be synchronized with the system. With the help of data presentation, schools can take control over the information of practice students easily. By following these procedures, we could supervise the guide of practice more effectively and avoid the absence of our guidelines. Practice instructors could communicate with students through the system by issuing private messages to them.

What's more, practice instructors could also correct students' journals and publish them. As for teaching management units, they could examine concrete conditions of practice instructors in system and information for the correction of journals. About the enhancement for the holistic management of our practice, by big data's automatic analyze and summarize towards relevant data, schools could have a further comprehension for the circumstances of practice unit and distribution of students; Furthermore, we would be able to master data of various kind of the practice. Then we can place on these files and save them in electronic way (including attendance records, practice journals, practice reports, practice achievements, practice summaries. etc.). By using information platform like Weibo and WeChat to report and publize excellent practice cases, (including typical cases, practice insights, good practice journals, extraordinary achievements and compositions). Teaching management in schools could also arrange a mid-term check through the system by using random check and result checking in order to examine the practice progress and monitor on every link during the whole progress. The school establishes an effective

feedback and evaluation mechanism for practice. Arrange an investigation on the satisfaction, evaluation of students and evaluation of enterprises and teachers by using questionnaires to examine their results and progress of expected goals in practices. Students' practice journals, grades, instructors and evaluation made by enterprises could constitute the evaluation model of students' abilities.

On the one hand, these data could provide valuable information for company's personnel training; On the other hand, evaluations of practice units and instructors made by students would formulate another circle which would provide very effective feedbacks for later improvements on the practice.

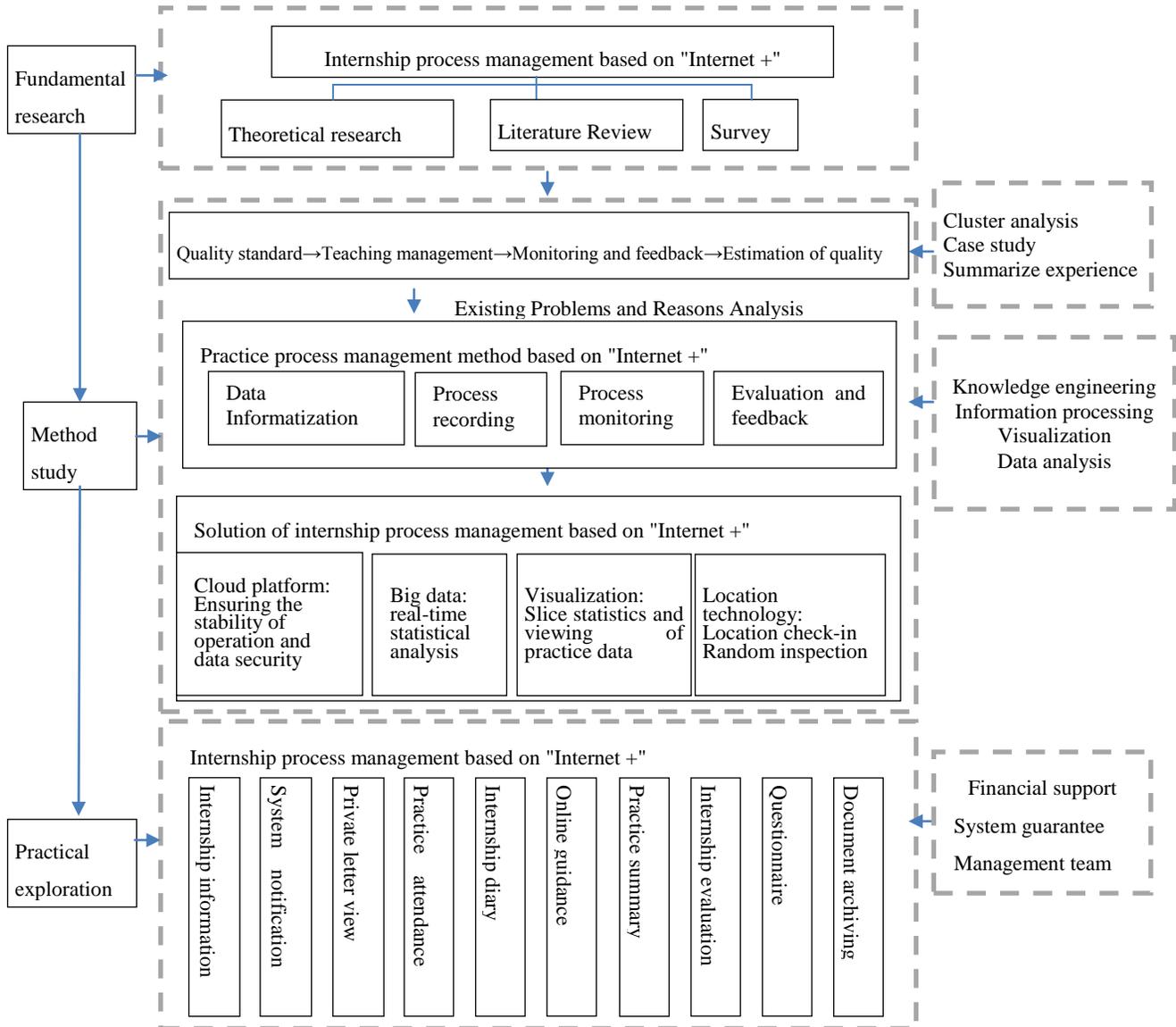


Figure 1 Research based on the internship process management of "Internet+"

IV. PRACTICAL EFFECT

In order to strengthen the practice process management, University of Jinan Quancheng College introduced the practice platform of "Internet+", and applied the technology of "Internet +" to provide all-round support in practice, so as to achieve management proceduralization and standardization of practice in universities and colleges. Last academic year, our school, 211 classes, 44 majors and 6

academies, overall 178 teachers and 6254 students, finished the practice process management by using the platform, realising the informatization and ensuring the accuracy of internship data.

The practice platform includes many roles, such as the Student, Tutor (school's and enterprise's), Intern Person In Charge (school's and enterprise's), and Educational Management (school's and academy's). The functions

corresponding to different roles are shown in figure 2.

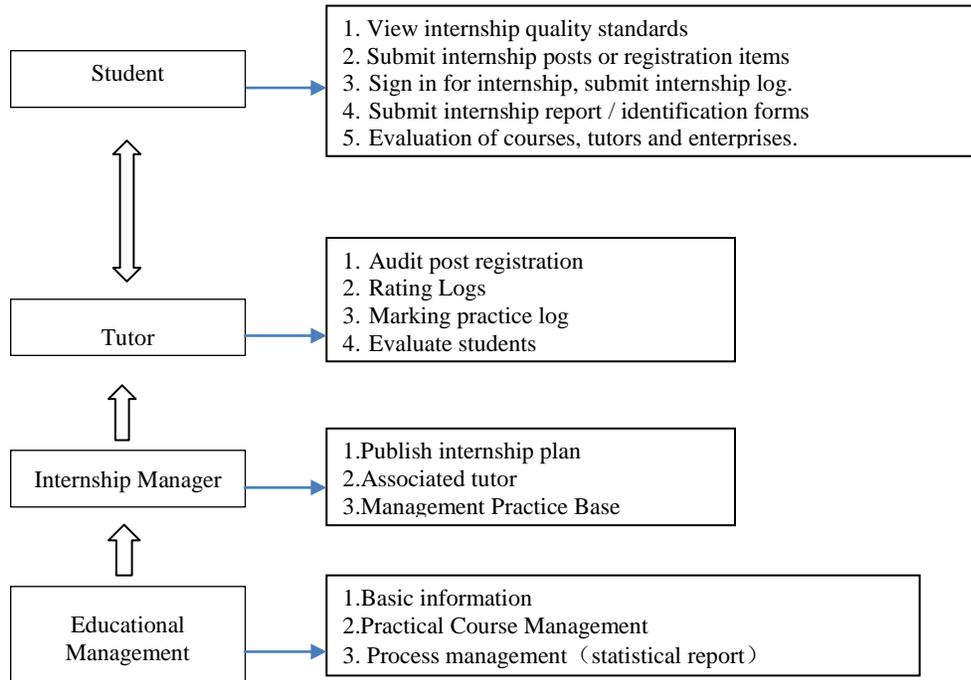


Figure 2: Role correspondence function of practice platform

Developed in the platform, such as Post Management, Internship Situation, Intern Management, Internship Daily Record (and Weekly Record) Submission, Assessment, Practice Evaluation and so on, so as to achieve effective supervision about each link in practice. Take the role of Tutor for example, after entering the platform, tutors can clearly know students' learning situation. It includes Agenda (Post Learning Audit, Weekly and Daily Record

Assessment, Report Assessment), Check-in Statistic and Process Management. Tutors can hold a direct dialogue with selected students by using the function of "Real Time Guidance" and release information to students under guidance by using "Station" or "Guidance Information", which effectively avoid the lack of internship guidance. The platform management page of tutors is shown in figure 3.

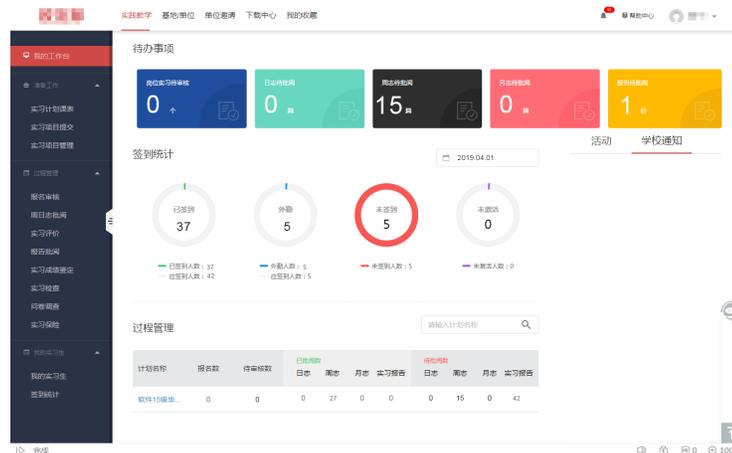


Figure 3 Page of tutor management

After practice, it will establish a real reputation by the evaluation of tutors, enterprises and students. Students rate valuable practical courses and evaluate the enterprise. The school evaluates the enterprise and the enterprise evaluates

students, and forms well matched data in industries and majors. The final internship evaluation data is shown in figure 4.

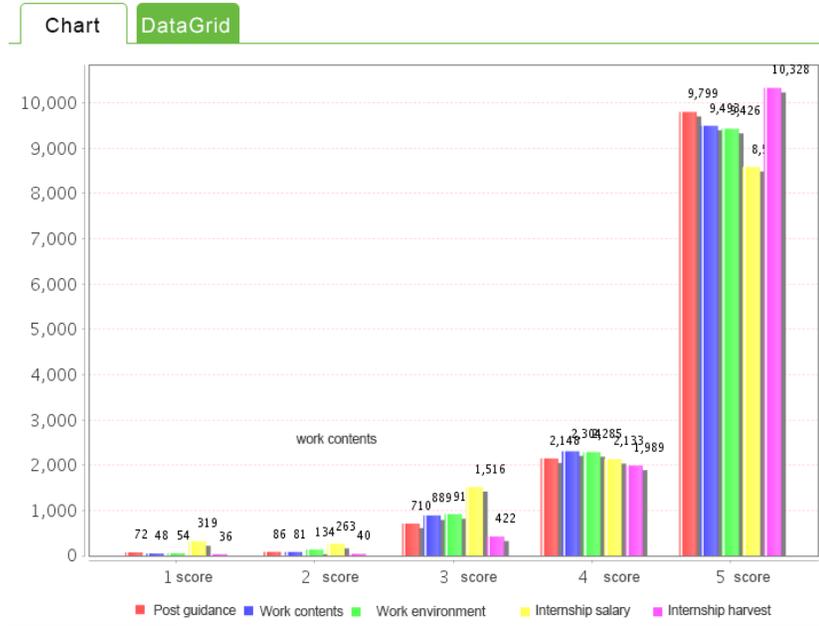


Figure 4 Internship evaluation result diagram

By using big data, the platform can show the present situation of the ratio of internship to professional counterparts, the retention rate of internship units, students' internship salary, the satisfaction degree of the students, the number and utilization ratio of practice base, number of students at the contracted base, students' retention salary and so on. At the end of the internship, the platform can also generate comprehensive statistical tables of internship process. It includes the summary table of practical teaching, the list of students' participation, the list of the process of students' participation, the statistical table of daily or weekly record scores, the list of teachers' guidance process, the summary table of check-in statistics, the statistics of students' practice report scores, the summary of practice base and so on.

V. CONCLUSION

Practice has proved that the "Internet +" internship platform not only realizes accurate data informatization, but also realizes visualization of internship process, including internship progress management, normalized internship inspection, timely feedback of situation, and data efficiency management. Through the platform accumulation of student evaluation, internship curriculum evaluation, enterprise evaluation and other big data, used to improve the internship program, improve the quality of internship. At the same time, the school in practice, constantly perfects the corresponding management system and achieves an efficient internship management mode. The research of this paper is an in-depth exploration of the existing internship teaching management and the internship management informatization research under the background of "Internet +". It is also a beneficial attempt to construct an all-round internship process management system.

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REFERENCE

- [1] He X M. The Research on Process Management of Undergraduate Enterprise Internship [D]. South China University of Technology, 2016.
- [2] Rafael Garcia, Jordi Puig. A model for improving the quality of student internship placements in engineering degrees [J]. International Journal of Advanced Corporate Learning, 2011(4): 4-11
- [3] Chen R H, Huo L J. Enlightenment of Professional Practice in Developed Countries on Post Practice in Higher Vocational Colleges in China [J]. Journal of Vocational Education, 2018 (07): 172-176.
- [4] Yu X M, Zhang H. Research on Process Design and Quality Control of Post Practice for Higher Vocational College Students [J]. Vocational and Technical Education, 2009, 30 (29):66-67+81.
- [5] Chen H, Du J Y, Wang F. Practice Management of Undergraduate Practice Based on Network Platform [J]. Science and Technology, 2014 (16):140-142.
- [6] Zhou X H. Innovative thinking on post practice management system of Applied Colleges and universities in the era of Internet + [J]. Education and Vocation, 2018 (07):100-103.
- [7] Yang X, Li J, Li J C, Huang H W. Research on post practice management of Higher Vocational Colleges under the background of "Internet +" [J]. Journal of Hunan Industry Polytechnic, 2018, 18 (03):129-132+136.
- [8] Su X X. Practice teaching management strategy in Universities Based on "Internet +" [J]. China Management Informationization, 2018, 21 (09):180-181.